ABSTRACT OF THE DISCLOSURE

A method for generating and transmitting optimal cell (base station) identification codes in a W-CDMA mobile communication system is disclosed. In the present invention, the cell identification codes are generated using Hadamard code and bi-orthogonal code. To optimize performance in a soft handover mode, cell identification codes are generated based on at least one of Hadamard codes and bi-orthogonal codes and then effectively transmitted through an uplink channel. Also, considering dynamic allocation depending on the size of an active set, optimal SSDT cell identifier codes having a maximized minimum Hamming distance are generated and then effectively transmitted through the uplink channel.